WE CLAIM:

1. A method of identifying compounds that induce GST expression in graminaceous plants comprising:

(a) contacting a graminaceous plant, or a cell or cell culture thereof, with a candidate compound suspected of being capable of inducing GST expression; and

(b) determining the level of GST expression in the plant, cell or culture.

2. The method of Claim 1, wherein, in step (b), the level of GST expression is determined by measuring the level of GST protein by means of an anti-GST antibody.

3. The method of Claim 2, wherein the anti-GST antibody binds to a protein comprising a polypeptide selected from the group consisting of a polypeptide which is a GST subunit and which comprises the amino acid sequence of SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, or 18, a polypeptide which is a GST subunit and which comprises an amino acid sequence substantially homologous to an amino acid sequence of SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, or 18, a polypeptide which is a GST subunit and which is encoded by the nucleic acid sequence of SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, or 17, and a polypeptide which is a GST subunit and which is encoded by a nucleic acid sequence substantially homologous to a nucleic acid sequence of SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, or 17.

4. The method of Claim 3, wherein the protein bound by the anti-GST antibody is a dimer of a polypeptide selected from the group consisting of a polypeptide which is a GST

subunit and which comprises the amino acid sequence of SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, or 18, a polypeptide which is a GST subunit and which comprises an amino acid sequence substantially homologous to an amino acid sequence of SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, or 18, a polypeptide which is a GST subunit and which is encoded by the nucleic acid sequence of SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, or 17, and a polypeptide which is a GST subunit and which is encoded by a nucleic acid sequence substantially homologous to a nucleic acid sequence of SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, or 17.

5. The method of Claim 1, wherein, in step (b), the level of GST expression is determined by measuring the level of GST mRNA by means of a hybridization probe.

6. The method of Claim 5, wherein the hybridization probe selectively hybridizes to the nucleic acid sequence of SEQ ID NOS:1, 3, 5, 7, 9, 11, 13, 15, or 17.

7. A kit for identifying compounds that induce GST expression in plants, said kit comprising an anti-GST antibody which binds to a protein comprising a polypeptide selected from the group consisting of a polypeptide which is a GST subunit and which comprises the amino acid sequence of SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, or 18, a polypeptide which is a GST subunit and which comprises an amino acid sequence substantially homologous to an amino acid sequence of SEQ ID NOS: 2, 4, 6, 8, 10, 12, 14, 16, or 18, a polypeptide which is a GST subunit and which is encoded by the nucleic acid sequence of SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, or 17, and a polypeptide which is

a GST subunit and which is encoded by a nucleic acid sequence substantially homologous to a nucleic acid sequence of SEQ ID NOS: 1, 3, 5, 7, 9, 11, 13, 15, or 17.

8. A kit for identifying compounds that induce GST expression in plants, said kit comprising a hybridization probe which selectively hybridizes to the nucleic acid sequence of SEQ ID NOS:1, 3, 5, 7, 9, 11, 13, 15, or 17.